

CLAIMS

1. A viewing apparatus comprising:

an acquiring unit operable to acquire an electronic document
5 file containing a first layer defined to present a document image
and a second layer defined to cover at least part of the first
layer;

a control unit operable to set a display mode of the second
layer depending on a pattern of viewing the electronic document
10 file; and

a display unit operable to display the first and second
layers, the second layer being displayed in the display mode
set by the control unit and overlaid on the first layer.

15 2. The viewing apparatus according to Claim 1, wherein
the control unit includes:

a judging unit operable to judge whether the electronic
document file is acquired over a network;

a setting unit operable to set the second layer to
20 a transparent mode if the judgment is affirmative, and to a
non-transparent mode if the judgment is negative; and

the display unit is operable to display the second layer
transparently in the transparent mode so that the document image
is visible, and display the second layer non-transparently in
25 the non-transparent mode so that the document image is not
visible.

3. The viewing apparatus according to Claim 2, wherein

the acquiring unit is operable to acquire the electronic document file containing:

a judgment instruction for judging whether the electronic document file is acquired over a network;

5 a modesetting instruction for setting the second layer to the transparent mode if the judgment is affirmative and to the non-transparent mode if the judgment is negative; and

a display instruction for displaying the first and second layers with the second layer being overlaid on the first layer,

the judging unit is operable to execute the judgment instruction,

the setting unit is operable to execute the mode setting instruction, and

15 the display unit is operable to execute the display instruction.

4. The viewing apparatus according to Claim 3, wherein

the acquiring unit includes a Web browser, and

20 the judging unit is operable to determine whether a path of the electronic document file includes a predetermined character string, and judge that the electronic document file is acquired over a network if the predetermined character string is included and that the electronic document file is not acquired over a network if the predetermined character string is not included.

5. The viewing apparatus according to Claim 4, wherein

the judging unit is operable to determine whether a path of the electronic document file includes the predetermined character string "http://", and judge that the electronic document file is acquired over a network if the predetermined character string "http://" is included and that the electronic document file is not acquired over a network if the predetermined character string "http://" is not included.

6. The viewing apparatus according to Claim 4, wherein

the judging unit includes:

a first determining unit operable to determine whether the path includes the predetermined character string "http://"; and

a second determining unit operable to determine whether the electronic document file is being executed using plug-in software or application software,

the judging unit is operable to judge that the electronic document file is acquired over a network if the first determining unit determines affirmatively and the second determining unit determines that plug-in software is used, and otherwise judge that the electronic document file is not acquired over a network.

7. The viewing apparatus according to Claim 6, wherein

the viewing apparatus stores first identification information identifying the viewing apparatus,

the electronic document file contains second identification information identifying an apparatus permitted to view the electronic document file;

the judging unit is operable to judge whether the first identification information matches the second identification information, and cause the first and second determining units to make the respective determinations when the first and second identification information matches, and

the control unit is operable to set the second layer to the non-transparent mode prior to the determinations by the first and second determining units if the first and second identification information does not match.

8. The viewing apparatus according to Claim 7, wherein

the electronic document file contains time information showing a predetermined time period, and

the control unit includes:

an offline control unit operable to set the second layer to the transparent mode even if the electronic document file is judged not acquired over a network, measure a time period during which the display unit displays the electronic document file, and set the second layer to the non-transparent mode when the measured time period reaches the predetermined time period shown by the time information.

9. The viewing apparatus according to Claim 2, wherein

the judging unit is operable to determine whether the electronic document file is being executed using plug-in software or application software, and judge that the electronic document file is acquired over a network if the plug-in software is used and that the electronic document file is not acquired over a

network if the application software is used.

10. An electronic document file creating apparatus for creating an electronic document file configured to be displayed in a different mode depending on a pattern in which the electronic document file is viewed, comprising:

a storage unit operable to store a first layer defined to present a document image;

a second layer creating unit operable to create a second layer defined to cover at least part of the first layer;

a control information creating unit operable to create viewing control information for changing a display mode of the second layer depending on a viewing pattern; and

a creating unit operable to create an electronic document file containing the first layer, the second layer, and the viewing control information.

11. The electronic document file creating apparatus according to Claim 10, wherein

the control information creating unit is operable to create the viewing control information containing:

a judgment instruction for judging, when the electronic document file is displayed on a viewing apparatus, whether the electronic document file is supplied to the viewing apparatus over a network;

a mode setting instruction for setting the second layer to a transparent mode if the judgment is affirmative and to a non-transparent mode if the judgment is negative; and

a display instruction for displaying the first and second layers with the second layer being overlaid on the first layer.

5 12. The electronic document file creating apparatus according to Claim 11, wherein

the judgment instruction is for determining whether a path of the electronic document file includes a predetermined character string, and judging that the electronic document file
10 is supplied to the viewing apparatus over a network if the predetermined character string is included.

13. The electronic document file creating apparatus according to Claim 12, wherein

15 the judgment instruction is for determining whether a path of the electronic document file includes the predetermined character string "http://", and judging that the electronic document file is supplied to the viewing apparatus over a network if the predetermined character string "http://" is included.

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14. The electronic document file creating apparatus according to Claim 13, wherein

the judgment instruction contains identification information identifying an apparatus that is permitted to view
25 the electronic document file, and

the judgment instruction is for determining, using the identification information, whether the viewing apparatus is permitted to view the electronic document file, and determining

whether the path includes the character string "http://" only when the viewing apparatus is determined to be permitted to view the electronic document file.

5 15. The electronic document file creating apparatus according to Claim 10, further comprising:

a document input unit operable to receive a document;

10 a first layer creating unit operable to create the first layer from the received document and stores the first layer to the storage unit;

a holding unit operable to store the electronic document file created by the creating unit;

15 a request receiving unit operable to receive a transmission request for the electronic document file from a viewing apparatus; and

a transmitting unit operable to, upon receipt of the transmission request, read the electronic document file from the holding unit and transmit the electronic document file to the viewing apparatus that issued the transmission request.

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16. An electronic document file viewing system for supplying an electronic document file created by an electronic document file creating apparatus to a viewing apparatus that allows a user to view the electronic document file,

25 the electronic document file creating apparatus comprising:

a storage unit operable to store a first layer defined to present a document image;

a second layer creating unit operable to create a second layer defined to cover at least part of the first layer;

a control information creating unit operable to create viewing control information for changing a display mode of the second layer depending on a viewing pattern; and

a creating unit operable to create an electronic document file containing the first layer, the second layer, and the viewing control information, and

the viewing apparatus comprising:

an acquiring unit operable to acquire the electronic document file;

a control unit operable to set a display mode of the second layer depending on a pattern in which the electronic document file is viewed, as specified in the control information; and.

a display unit operable to display the first and second layers, the second layer being displayed in the display mode set by the control unit and overlaid on the first layer.

17. A viewing method for use by a viewing apparatus, comprising:

an acquiring step of acquiring an electronic document file containing a first layer defined to present a document image and a second layer defined to cover at least part of the first layer;

a control step of setting a display mode of the second layer depending on a pattern of viewing the electronic document file; and

a display step of displaying the first and second layers, the second layer being displayed in the display mode set in the

control step and overlaid on the first layer.

18. A computer program for use by a viewing apparatus, comprising code operable to cause the viewing apparatus to perform:

5 an acquiring step of acquiring an electronic document file containing a first layer defined to present a document image and a second layer defined to cover at least part of the first layer;

 a control step of setting a display mode of the second layer
10 depending on a pattern of viewing the electronic document file; and

 a display step of displaying the first and second layers, the second layer being displayed in the display mode set in the control step and overlaid on the first layer.

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19. An electronic document file creating method for creating an electronic document file configured to be displayed in a different mode depending on a pattern in which the electronic document file is viewed, the electronic document file creating
20 apparatus storing a first layer defined to present a document image, the method comprising:

 a second layer creating step of creating a second layer defined to cover at least part of the first layer;

 a control information creating step of creating viewing
25 control information for changing a display mode of the second layer depending on a viewing pattern; and

 a creating step of creating an electronic document file containing the first layer, the second layer, and the viewing

control information.

20. A computer program for use by an electronic document file
creating apparatus that creates an electronic document file
5 configured to be displayed in a different mode depending on a
pattern in which the electronic document file is viewed, the
electronic document file creating apparatus storing a first layer
defined to present a document image, the computer program
comprising code operable to cause the electronic document file
10 creating apparatus to perform:

a second layer creating step of creating a second layer
defined to cover at least part of the first layer;

a control information creating step of creating viewing
control information for changing a display mode of the second
15 layer depending on a viewing pattern; and

a creating step of creating an electronic document file
containing the first layer, the second layer, and the viewing
control information.